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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,141	05/14/2001	Jay Ryan Torgerson	MWS-006	1730

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BOSTON, MA 02109

EXAMINER

RIES, LAURIE ANNE

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,141

Applicant(s)

TORGERSON, JAY RYAN

Examiner

Laurie Ries

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-18, 20-22, 25-28, 31-35 and 37-40 is/are rejected.
- 7) ☒ Claim(s) 7-11, 19, 23-24, 29-30, 36, and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to communications: amendment, filed 19 November 2004, to the original application, filed 14 May 2001.

Claims 1-6, 12-18, 20-22, 25-28, 31-35, and 37-40 remain rejected under 35 U.S.C. 103(a).

The rejection of claims 7-11, 19, 23-24, 29-30, 36, and 41 under 35 U.S.C. 103(a) has been withdrawn.

Claims 1-41 are pending. Claims 1, 12, 20, 26, 31, and 37 are independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 12, 13, 20, 21, 25-27, 31, 32, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Patent 6,256,028 B1) in further view of Kikuchi (U.S. Patent 4,819,189).

As per claims 1, 12, 20, 25, 26, 31, and 37, Sanford discloses a method, electronic device in the form of a computer, memory, and system of navigating a hierarchical diagram, in the form of a Web-based menu system, which contains levels and associated sub-levels, and includes displaying a first view of the diagram or menu structure to a user of the electronic device on the display, which represents a level of the diagram or menu and includes a graphical reference, in the form of a triangle, to one of the sub-levels associated with the level represented by the first view. (See Sanford, Figure 7, and Column 6, line 67, Column 7, lines 1-2). This method and system also includes traversing the first view of the diagram or menu with a user-operated pointing device, such as a mouse, which inserts a cursor in the first view. The cursor moves in a synchronized manner with user-initiated movements of the pointing device, or mouse. (See Sanford, Column 7, lines 11-14). Sanford does not disclose expressly the step of manipulating the mouse so that the cursor in the first view enters an active region located within the graphical reference to a sub-level, where the active region includes a portion of the graphical reference and where the cursor movement automatically triggers replacement of the first view with the second view in the display, also displaying the cursor in the second view. Kikuchi discloses that upon movement of a cursor to the active region of a second view, represented by the visible portion of an underlying window, with the underlying window representing the second view, the first view, being

Art Unit: 2176

the displayed window, is replaced by the second view, represented by the underlying window, and the cursor appears in the second view. (See Kikuchi, Figures 2A and 2B, Column 5, lines 24-68, and Column 6, lines 1-14). Sanford and Kikuchi are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method for navigating a hierarchical diagram, in the form of a Web-based menu system, of Sanford, with the cursor control and display manipulation of Kikuchi. The motivation for doing so would have been to eliminate the need for the user to manually press a mouse button or enter special control codes via a keyboard to initiate a change to the display. (See Kikuchi, Column 7, lines 48-65). Therefore, it would have been obvious to combine Kikuchi with Sanford for the benefit of eliminating unnecessary actions by a user to obtain the invention as specified in claims 1, 12, 20, 25, 26, 31, and 37.

As per claims 2, 13, 21, 27, 32, and 38, Sanford and Kikuchi disclose the limitations of claims 1, 12, 20, 26, 31, and 37 as described above. Kikuchi also discloses the step of manipulating the pointing device so that the cursor in the display travels from the first view into the graphical reference to a second view, represented by the visible portion of an underlying window, and that the cursor appears in the second view without stopping. (See Kikuchi, Column 5, lines 24-68, and Column 6, lines 1-14). Sanford and Kikuchi are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system

and method of Sanford and Kikuchi with the cursor movement of Kikuchi. The motivation for doing so would have been to eliminate the need for the user to manually press a mouse button or enter special control codes via a keyboard to initiate a change to the display. (See Kikuchi, Column 7, lines 48-65). Therefore, it would have been obvious to combine Kikuchi with Sanford for the benefit of eliminating unnecessary actions by a user to obtain the invention as specified in claims 2, 13, 21, 27, 32, and 38.

As per claims 3, 22, and 28, Sanford and Kikuchi disclose the limitations of claims 1, 20, and 26 as described above. Kikuchi also discloses that a graphical reference including an active region is presented in the form of the visible portion of an underlying window. (See Kikuchi, Column 7, lines 17-47). Kikuchi also discloses manipulating the mouse so that the cursor in a second view, in the form of an underlying window, enters a graphical reference to the level, and the cursor reappears in the first view. (See Kikuchi, Figures 2A and 2B, Column 5, lines 24-67, and Column 6, lines 1-14). Sanford and Kikuchi are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the cursor movement and display manipulation of Kikuchi. The motivation for doing so would have been to eliminate the need for the user to manually press a mouse button or enter special control codes via a keyboard to initiate a change to the display. (See Kikuchi, Column 7, lines 48-65). Therefore, it would have been obvious to combine Kikuchi with Sanford for the benefit of eliminating

unnecessary actions by a user to obtain the invention as specified in claims 3, 22, and 28.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Patent 6,256,028 B1) and Kikuchi (U.S. Patent 4,819,189) as applied to claim 1 above, and further in view of Young (U.S. Patent 5,299,307).

As per claim 4, Sanford and Kikuchi disclose the limitations of claim 1 as described above. Sanford and Kikuchi do not disclose expressly providing an escape rate associated with the graphical reference to the sub-level, which is a designated cursor speed which the cursor must exceed while traveling through the active region located within the graphical reference to the sub-level in order to avoid replacing the first view with the second view in the display. Young discloses that a cursor must exceed a certain speed while traveling through an active region to avoid altering the display. (See Young, Figure 22, and Column 14, lines 49-62). Sanford, Kikuchi and Young are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the cursor speed control of Young. The motivation for doing so would have been to assist in determining whether or not user's intention was to alter the display. (See Young, Column 2, lines 35-38). Therefore, it would have been obvious to combine Young with Sanford and Kikuchi for the benefit of easily determining the user's intentions to obtain the invention as described in claim 4.

As per claim 5, Sanford, Kikuchi and Young disclose the limitations of claim 4 as described above. Young also discloses manipulating the pointing device, or mouse, so that the cursor rate of travel exceeds the escape rate while traveling through the active region located in the graphical reference to the sub-level, and the first view remains displayed in the display. (See Young, Figure 22, and Column 14, lines 49-62). Sanford, Kikuchi and Young are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the cursor speed control of Young. The motivation for doing so would have been to assist in determining whether or not user's intention was to alter the display. (See Young, Column 2, lines 35-38). Therefore, it would have been obvious to combine Young with Sanford and Kikuchi for the benefit of easily determining the user's intentions to obtain the invention as described in claim 5.

As per claim 6, Sanford, Kikuchi and Young disclose the limitations of claim 4 as described above. Young also discloses manipulating the pointing device, or mouse, so that the cursor rate of travel does not exceed the escape rate while traveling through the graphical reference to the sub-level, and that the first view is replaced by the second view in the display. (See Young, Figure 22, and Column 14, lines 49-62). Sanford, Kikuchi and Young are analogous art because they are from the same field of endeavor of manipulating and simplifying user displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the cursor speed control of Young. The motivation for doing

so would have been to assist in determining whether or not user's intention was to alter the display. (See Young, Column 2, lines 35-38). Therefore, it would have been obvious to combine Young with Sanford and Kikuchi for the benefit of easily determining the user's intentions to obtain the invention as described in claim 6.

Claims 14, 15, 33, 34, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Patent 6,256,028 B1) and Kikuchi (U.S. Patent 4,819,189) as applied to claims 12, 31, and 37 above, and further in view of Simmons (U.S. Patent 6,396,488 B1).

As per claims 14, 18, 33, and 39, Sanford and Kikuchi disclose the limitations of claims 12, 31 and 37 as described above. Sanford and Kikuchi do not disclose expressly that the hierarchical diagram is a flow chart. Simmons discloses that a diagram may represent a flowchart. (See Simmons, Column 3, lines 48-50). Sanford, Kikuchi and Simmons are analogous art because they are from the same field of endeavor of manipulating diagrams or displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the flowchart of Simmons. The motivation for doing so would have been to allow a user to traverse a path within a diagram or display that has an arrangement of shapes. (See Simmons, Column 1, lines 55-57). Therefore, it would have been obvious to combine Simmons with Sanford and Kikuchi to provide a variety of shapes within which the user may maneuver the display to obtain the invention as specified in claims 14, 18, 33, and 39.

As per claims 15, 34, and 40, Sanford and Kikuchi disclose the limitations of claims 12, 31 and 37 as described above. Sanford and Kikuchi do not disclose expressly that the hierarchical diagram is a state diagram. Simmons discloses that a diagram may represent any suitable graphics-based chart or diagram. (See Simmons, Column 3, lines 48-50). A state diagram is a diagram consisting of circles to represent states and directed line segments to represent transitions between the states (as referenced in www.dictionary.com), which is included in the definition of a graphics-based chart or diagram. Sanford, Kikuchi and Simmons are analogous art because they are from the same field of endeavor of manipulating diagrams or displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the graphics-based diagram of Simmons. The motivation for doing so would have been to allow a user to traverse a path within a diagram or display that has an arrangement of shapes. (See Simmons, Column 1, lines 55-57). Therefore, it would have been obvious to combine Simmons with Sanford and Kikuchi to provide a variety of shapes within which the user may maneuver the display to obtain the invention as specified in claims 15, 34, and 40.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Patent 6,256,028 B1) and Kikuchi (U.S. Patent 4,819,189) as applied to claims 12, 31, and 37 above, and further in view of Simmons (U.S. Patent 6,396,488 B1) and Mathworks Stateflow 3.0.2.

As per claim 17, Sanford and Kikuchi disclose the limitations of claim 12 as described above. Sanford and Kikuchi do not disclose expressly that the method is part of a stateflow editing application. Simmons discloses that a diagram may represent any suitable graphics-based chart or diagram. (See Simmons, Column 3, lines 48-50). A stateflow editing application provides users with the ability to develop graphical models of event-driven systems using finite state machine theory, statechart formalisms, and flow diagram notation (as referenced at www.mathworks.com, Stateflow 3.0.2 product description); therefore, a stateflow chart is included in the definition of a graphics-based chart or diagram. Sanford, Kikuchi, Simmons and Mathworks are analogous art because they are from the same field of endeavor of manipulating diagrams or displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the graphics-based diagram of Simmons and Mathworks. The motivation for doing so would have been to allow a user to traverse a path within a diagram or display that has an arrangement of shapes. (See Simmons, Column 1, lines 55-57). Therefore, it would have been obvious to combine Simmons and Mathworks with Sanford and Kikuchi to provide a variety of shapes within which the user may maneuver the display to obtain the invention as specified in claim 17.

Claims 16 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Patent 6,256,028 B1) and Kikuchi (U.S. Patent 4,819,189) as

applied to claims 12 and 31 above, and further in view of Simmons (U.S. Patent 6,396,488 B1) and Kodosky (U.S. Patent 4,901,221).

As per claims 16 and 31, Sanford and Kikuchi disclose the limitations of claim 12 as described above. Sanford and Kikuchi do not disclose expressly that the method is part of a block diagram editor application. Simmons discloses that a diagram may represent any suitable graphics-based chart or diagram. (See Simmons, Column 3, lines 48-50). Kodosky discloses that a block editor can be used to construct and to display a graphical diagram (See Kodosky, Column 7, lines 44-46); therefore, a block editor application may be used to construct a diagram suitable for use within the described invention. Sanford, Kikuchi, Simmons and Kodosky are analogous art because they are from the same field of endeavor of manipulating diagrams or displays. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the system and method of Sanford and Kikuchi with the graphics-based diagram of Simmons and Kodosky. The motivation for doing so would have been to create a system representing the flow of data graphically in order to more easily model processes. (See Kodosky, Column 3, lines 38-47). Therefore, it would have been obvious to combine Sanford and Kikuchi with Simmons and Kodosky for the benefit of providing a simplified graphical modeling environment to obtain the invention as specified in claims 16 and 35.

Response to Arguments

Applicant's arguments filed 19 November 2004 have been fully considered but they are not persuasive.

With regard to claims 1, 12, 20, 25, 26, 31 and 37, Applicant argues that the Kikuchi reference does not teach manipulating the pointing device so that the cursor in the first view enters an active region located within the graphical reference to a sub-level (See Amendment, filed 19 November 2004, Page 13). The Office respectfully disagrees. In the example disclosed by the Kikuchi reference, the portion of the sub-level window still visible on the display of Kikuchi is equivalent to the active region located within a graphical reference to a sub-level of the Instant Application.

Specifically, the windows are graphical representations of a hierarchical structure on the display screen. If a user manipulates a pointing device such that the cursor moves from the current location in the currently active (a.k.a. fully visible) window to a portion of the sub-level window that is visible on the display, which is itself a graphical reference to a sub-level window, the sub-level window is brought to the foreground and the cursor is relocated to within this sub-level window (See Kikuchi, Figures 2A-2B, Column 5, lines 24-67, and Column 6, lines 1-14).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine would be to eliminate the need for a user to manually activate (a.k.a. "click") a mouse or pointing device to access a sub-level region of the diagram. The automatic display of a sub-level window of Kikuchi can be applied to the automatic display of a sub-menu of Sanford.

Allowable Subject Matter

Claims 7-11, 19, 23-24, 29-30, 36, and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2176

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached at (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER